

## DESCRIPTIONS OF TWO NEW AUSTRALIAN GOBIES

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Plate viii.

THE fishes that form the basis of this contribution were selected along with those dealt with in the preceding paper, but, not occurring in South Australia, are described under a separate title.

### Family GOBIIDAE.

#### **BOLEOPHTHALMUS CAERULEOMACULATUS** sp. nov.

Plate viii, fig. 1.

D.V. 28; A. 27; P. 21; V. i, 5; C. 17.

Depth 4.1 in the length to the hypural joint; head 3.6 in the same; eye 10.0 in the head; longest dorsal spine 0.6 longer than the head; highest dorsal ray 1.8, highest anal ray 3.4 in the head.

Head covered with papillae representing rudimentary scales; eyes close together, situated on the upper profile of the head, and above the middle of the mouth; snout very oblique, the space between the orbit and the premaxillaries 3.7 in the length of the head; anterior nostril opening at the end of a lobular projection of the upper lip; posterior nostril a simple opening immediately before the eye; maxillary reaching far beyond the eye, covered by the upper lip; mandible closing within the upper jaw; tongue thick and fleshy, adnate to the floor of the mouth; three subulate teeth on each side of the premaxillary symphysis, followed by a single row of small cardiform teeth; mandible with a single row of subhorizontal teeth, which are largest anteriorly, somewhat flattened and obtusely pointed; a large curved canine on each side of the mandibular symphysis; palate toothless; gill-openings not so wide as the base of the pectoral, and scarcely wider than the isthmus separating them.

Body moderately elongate, compressed and covered with imbricate, cycloid scales, which are of moderate size posteriorly, but become rudimentary as they approach the nape; they extend on to the breast and base of the pectoral; a small genital papilla behind the anus.

*Fins.* First dorsal commencing well behind the vertical of the pectoral, and separated from the second by a space, which is longer than the eye; the spines are

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filamentous, the fourth the longest and reaching beyond the middle of the second dorsal; second dorsal with the margin straight and somewhat pointed posteriorly; the rays increase a little in length backwards to the hinder part of the fin; anal commencing beneath the fourth dorsal ray and terminating slightly behind the last; the fin is lower than, but of similar form to, the second dorsal; pectoral somewhat pointed, almost reaching the vertical of the vent, the lower rays a little thickened; ventrals in front of the pectorals and completely united; caudal somewhat pointed, the lower rays reduced and thickened.

*Colour-markings.* General colour greyish-brown in alcohol, the head lighter; each scale of the body with a bluish centre, while the papillae on the head are mostly pale blue; first dorsal greyish, with a broad yellow margin, the whole closely spotted with white; second dorsal dark grey, with about seven rows of white, dark-edged ocelli between the rays; caudal dark grey, with numerous similar ocelli between the rays; pectorals, ventrals and anal uniformly coloured.

Described and figured from a specimen 207 mm. long, which is selected as the holotype; four others of about the same size differ only in the relative lengths of their dorsal spines, which are much shorter in one sex than in the other.

The increased number of dorsal and anal rays distinguishes this species from all except *B. dussumieri* Cuvier and Valenciennes, to which it is closely allied, but differs in its colour-markings, the first dorsal particularly, being ornamented with light instead of dark spots, as in that species.

*Loc.* Adelaide River, Northern Territory.

*Type.* In the South Australian Museum.

### Family GOBIIDAE.

### OXYURICHTHYS Bleeker.

The following species would enter *Psclaphias* Jordan and Seale, which is distinguished from the typical species of *Oxyurichthys* by the possession of an ocular tentacle, but this character in itself does not appear to us to be of generic worth.

### OXYURICHTHYS CORNUTUS sp. nov.

Plate viii, fig. 2.

D.vi, 1, 12; A.14; P.22; V.i, 5; C.15; L.lat.51; L.trans.16.

Depth 4.6 in the length to the hypural joint; head 3.8 in the same; eye 4.6 in the head, and 1.5 in the snout, which is 3.0 in the head; interorbital width about 2.6 in the eye; depth of caudal peduncle 2.2 in the head; breadth between pectoral bases 1.8 in the depth.

Head naked, with upraised lines of mucigerous pores on the cheeks, operculum and nape; a low nuchal crest commences above the preoperculum and

unites with the base of the anterior dorsal spine: eyes of moderate size, separated by a narrow interorbital space, and each with a stout tentacle: snout forming a convex curve with the upper profile of the head: anterior nostril in a short tube near the lip, the posterior one is a large simple opening in the middle of the snout: maxillary pointed posteriorly, reaching backward to below the hinder third of the eye: mandible slightly longer than the upper jaw: premaxillary teeth cardiform, subequal, in a single series: mandibular teeth in a narrow band, the inner ones somewhat enlarged, the others villiform: no distinct canines: palate toothless: tongue obtusely pointed, only its tip free: gill-openings lateral, separated by a broad interspace, which is about one and one-half times as wide as the eye: shouldered-girdle smooth, without papillae.

Body moderately deep, covered with scales which are ctenoid as far forward as the second dorsal and cycloid anteriorly: they extend forward to the sides of the nape above the preopercular margin, and on to the breast, but the pectoral base is naked: genital papilla well developed.

*Fins.* First dorsal commencing behind the pectoral base, its spines filamentous, the second reaching backward to about the middle of the soft dorsal: the membrane from the last almost connects with the base of the first ray: second dorsal much damaged, the rays increasing in length backward: the posterior ones overlap the base of the caudal: anal commencing beneath the second or third dorsal ray, and terminating slightly behind the last: the rays increase in length backwards, and the posterior ones overlap the caudal base: pectoral obtusely pointed, median rays longest, reaching to the vertical of the third anal ray: ventral large, wholly united, almost reaching the vent: caudal pointed, the median rays produced.

*Colour-markings.* Yellowish in alcohol, with dusky blotches along the sides and back: each scale of the back with a dark round spot near its margin: head and nape with some symmetrical markings, the most distinct of which is a dark patch under the eye and another on the operculum: first dorsal fin with horizontal rows of dark-edged ocelli between the spines: second dorsal with numerous double rows of inter-radial blackish spots: elongated dark spots between the rays of the upper half of the caudal: numerous small, dark, inter-radial spots on the pectoral: membrane of the anal fin dusky.

Described and figured from a single specimen 135 mm. long, which is, unfortunately, somewhat damaged. It is very similar in both form and colour-marking to an Indian example of *O. cristatus* Day, with which we have compared it, but its scales are largely ctenoid instead of wholly cycloid. It is also apparently very close to other species of *Oxyurichthys*, such as *O. tentacularis* Cuv. and Val., and *O. microlepis* Bleeker, but the combination of a nuchal crest, ocular tentacles, scale-counts and colour-markings appear to distinguish it from all.

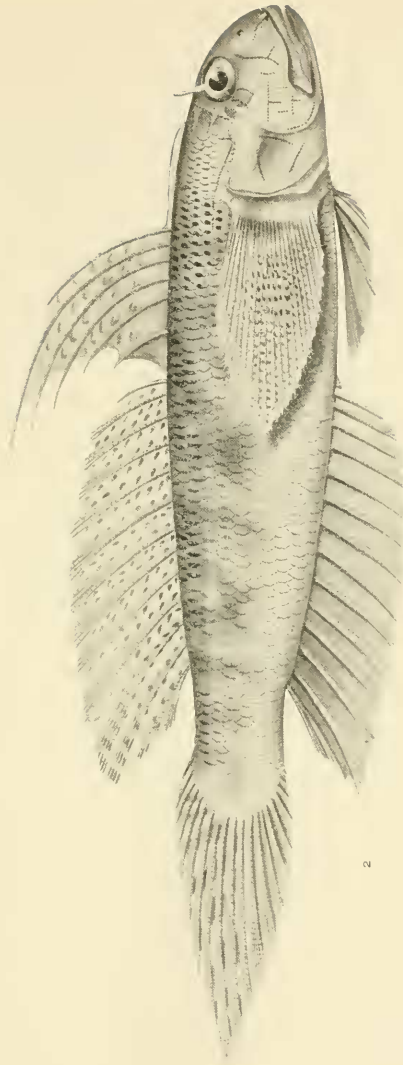
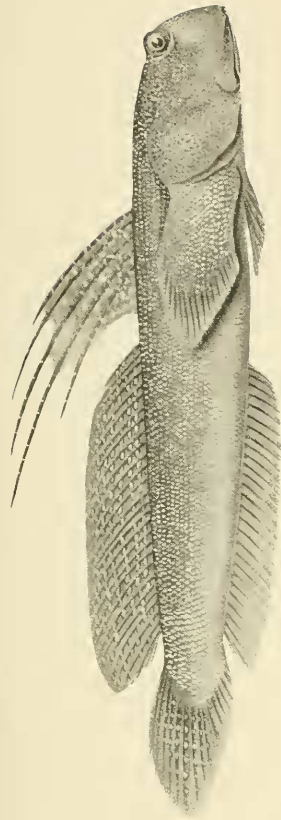
*Loc.* Cairns, Queensland. Coll. J. A. Anderson.

*Type.* In the South Australian Museum.

Explanation of Plate viii.

Fig. 1. *Boleophthalmus caeruleomaculatus* sp. nov. Holotype 207 mm. long, from the Adelaide River, Northern Territory.

Fig. 2. *Oxyurichthys cornutus* sp. nov. Holotype 135 mm. long, from Cairns, Queensland.



Phyllis Clarke, del.

AUSTRALIAN GOBIES.